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09/694,806

SERIAL NO.: FILED:

10/23/2000

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AMENDMENTS TO THE SPECIFICATION

In the Specification:

Please replace the paragraph 3 beginning on page 1, with the following rewritten paragraph in order to correct equation $s(t) = A (\cos 2\pi f_c t + \theta_k + \phi)$:

 $\pi/4$ -shift QPSK modulators are known in the art and are used in digital communications systems. In the quaternary phase modulation, the signal transmitted in a time interval can be written as $s(t) = A \cos(2\pi f_c t + \theta_k + \phi)$, where θ_k denotes the message to be sent in said interval, φ is the carrier phase when t=0 and in the absence of any phase modulation, and θ_k has eight different values, four at odd times and four at even times, as shown in Fig. 1. In said modulators, the modulated baseband - which, in exponential form, can be written as $s(t)=e^{i(\theta k+\phi)}$ is inputted to a lowpass shaping filter, usually having a symmetric response and typically realized by an FIR digital filter.

Please replace the paragraph 2 beginning on page 11, with the following rewritten paragraph in order to correct the reference number of the oversampling counter from 17 to 16.

The register outputs are provided as an address to the look-up tables. In the look-up table, for each register address, a predetermined number of sample values are stored in consecutive locations. An address system is therefore provided, wherein each register's content, the high addresses or most significant bits (MSB), are provided by Muxes and the sample values addresses, least significant bits (LSB), are provided by an oversampling counter 16, to be described later.